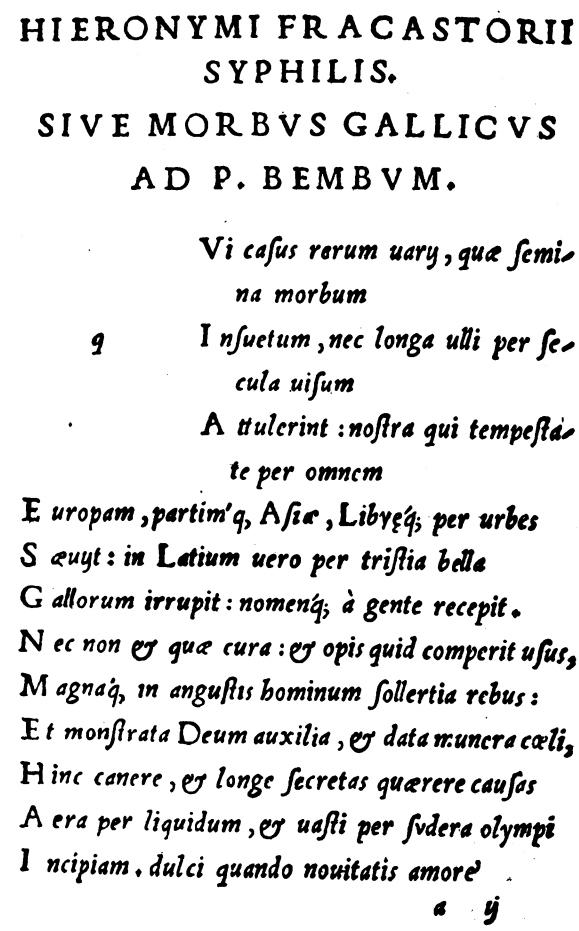

HIERONYMI FRACASTORII
SYPHILIS.
SIVE MORBVS GALLICVS
AD P. BEMBVM.

Vi caſus rerum uary, quæ ſemi-
na morbum
I nſuetum, nec longa ulli per ſe-
cula uiſum
A ttulerint: noſtra qui tempeſta-
te per omnem
E uropam, partim'q, Aſiæ, Libyęq; per urbes
S æuyt: in Latium uero per triſtia bella
G allorum irrupit: nomenq; à gente recepit.
N ec non & quæ cura: & opis quid comperit uſus,
M agnaq, in anguſtis hominum ſollertia rebus:
E t monſtrata Deum auxilia, & data munera cœli,
H inc canere, & longe ſecretas quærere cauſas
A era per liquidum, & uaſti per ſydera olympi
I ncipiam, dulci quando nouitatis amore
a ij

Fig. 3—First page of text from Fracastoro's *Syphilis, sive morbus Gallicus*, First Edition, Verona, 1530. Courtesy Dr. LeRoy Crummer, whose beautiful large margin copy contains several pages of manuscript material in a contemporary hand apparently continuing the poem.

ing the disease as followed by the natives of America, where the wood grows, and as revealed by them to the Europeans.

The latter part of the poem is concerned with a lengthy mythical story of the shepherd of King Alcithous, Syphilis by name, who by defying Apollo in a bitter drought was punished by being the first to contract the disease.

It is easy to see how such an interesting poem, combining practical medical skill with great artistic ingenuity, should become deservedly popular. It went through very many editions, and has been translated into almost every important European language. Fracastoro's *De Contagionibus* (1546), a really great scientific contribution to medicine, deserves similar recognition, for in it is enunciated clearly the modern doctrine of the specific character of fevers, the differentiation as a clinical entity of typhus fever, and the basis of modern teaching on infection by the classification of the modes of infection. In addition to its excellent discussion of syphilis, this treatise also contains a still unappreciated, in spite of Osler's eulogy,[4] account of phthisis.

The splendid new and complete English translation,[5] with extensive notes and bibliographical and historical comments, of the *De Contagione* by Prof. W. C. Wright of Bryn Mawr, makes Fracastoro's most important contribution available to modern readers. This should result in general recognition of Fracastoro's significance in the slow transition from the ancient humoral conception of disease to the present specific notion of fevers. It is heartening to note an increasing interest on the part of modern classical scholars in the scientific aspects of classical and mediaeval writers. Prof. Wright's excellent effort is, let us hope, only the beginning of many similar studies in medical history.

Truly Fracastoro was a great and brilliant man: physician, poet, astronomer, physicist, and humanist. In his calm achievements, in spite of the restlessness of his age, we may, four hundred years later in a similar restless age, find much comfort and inspiration.

International Health Board, Rockefeller Foundation, 61 Broadway.

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CLINICAL NOTES AND CASE REPORTS

THE RADICULAR SYNDROME FOLLOWING INFECTION WITH TETANUS

REPORT OF CASE

By MARY LAWSON NEFF, M. D.
Los Angeles

A CASE of chronic unilateral tetanus, not conforming to any textbook description of the disease; presenting many of the symptoms characterizing the "radicular syndrome"; continuing for ninety days with steadily increasing severity; and recovering with dramatic rapidity upon the administration of tetanus anti-toxin on the ninety-first day—such a case seems of sufficient interest and importance to be reported as fully as the records make possible.

As the patient was seen and treated at different times by several physicians, and the case presented before medical groups for study, the plan of securing all available information and fusing this with the writer's own records, has been followed, and the result edited so as to make a connected account. No one physician could have supplied all the data embodied in this study.

REPORT OF CASE

A. L., an intelligent working man, aged forty-one, sought relief for what he stated had been diagnosed as a severe neuritis. His previous history was that

of a man in fair health, in spite of an arrested tuberculosis of moderate extent, and a slight heart lesion. He had worked regularly for a number of years.

When first seen, he had already been treated, apparently with massive doses of aspirin, by two or three physicians in as many localities. He was emaciated and haggard, and his story of intense suffering was easy to believe.

The pain was confined to the dorsal region on the right side, and followed a band-like zone around the trunk, indicating a radicular origin involving the roots of the fifth to the ninth dorsal spinal roots. The pain was described as acute, constant, and of a burning character, and extended slightly beyond the axillary line. It had persisted for some ten weeks with gradually increasing severity, so that sleep was well-nigh impossible. The patient stated that almost immediately upon falling asleep he would be awakened by a sensation "as if something shot me," followed by excruciating pain, and cramps in the intercostal muscles of the affected zone. Movement was painful and the area was sore to the touch.

Firm pressure on the two sides of the spine was described as producing very different sensations. On the right side the pressure seemed to penetrate deeply, and produced extreme pain. On the left side the sensation was entirely superficial. No disturbance of tactile sensation to light touch was observed, but the more delicate meticulous tests were not made. Pinpricks produced normal pain reaction on the left side, but on the right side acute pain with muscular spasm.

Reaction to heat was normal on the left side, but painful on the right. Cold applied to the left side produced a normal sensory response, but on the right intense pain and muscular spasm.

Patient had noticed a tendency to fall when he tried to rise from bed, but no disturbance of equilibrium was found such as suggests cerebral involvement. The patellar reflex was notably exaggerated on the right side, normal on the left. No muscular atrophy was observable. No herpes occurred at any time. Dejerine's sign was not noted. Pulse and temperature were normal throughout the entire period of observation.

Laboratory findings were as follows: Blood Wassermann negative; complement fixation reactions for tuberculosis two plus positive. Spinal fluid: Wassermann and complement fixation tests negative; cell count two per cubic millimeter; protein excess negative; colloidal gold test negative. Increased pressure of spinal fluid was noted, and patient felt some relief after puncture. Urinalysis showed some increase of basic acid salts; sugar, .72 per cent; otherwise normal. Radiograph showed no evidence of bone involvement, destructive or hypertrophic, ruling out osteo-arthritis.

On the basis of these findings a tentative diagnosis of radiculitis—or the "radicular syndrome"—was made, with some symptoms not accounted for, notably the muscular spasms, which were more severe than those reported as occurring in some cases of radiculitis. An infective origin was assumed, but not till later discovered.

The patient was presented for study and diagnosis at the County Medical Society in the small city where the case was seen, and later similarly at a hospital staff meeting. As he was entirely without means, his small savings having been exhausted early in the course of the illness, he was sent to the county hospital, located some miles out in the country. Here he had good care, and was observed by an excellent diagnostician serving on the staff at the time. No further progress was made as to diagnosis.

Hydrotherapy was tried at this time, given by a competent nurse. Persistent attempts to use alternating heat and cold were finally abandoned because of the extreme suffering caused. The nurse reported that when cold was applied the patient screamed with agony, and begged her to desist. The violent muscular contractions caused included the pectoral muscles as well as those of the dorsal region.

The only symptom referable to the left side noted up to this time was reported by the nurse in this connection. When cold was applied to the left side a slight degree of hypersensitiveness was noted at the fourth dorsal root, and slight contractions of the corresponding intercostal muscles occurred.

Arrangements were at this time made to transfer the patient to a private hospital in the city for further study; and for a number of days he was carefully observed by several members of the hospital staff. By this time his condition had grown worse and a wider area of spinal roots was involved, still confined to the right side. A period of thirtv-two days had now elapsed since the notes on the case were begun.

The patient stated at this time that his pain was "higher up in the spine" than at any previous time. He showed marked prostration and his condition was regarded as grave. He complained of feeling extreme cold, beginning in the right foot and then extending up the leg. This sensation was followed by the objective sign of "goose-flesh." Hyperesthesia to both touch and temperature was increased.

Suddenly the patient developed in rapid succession the following symptoms: Both tonic and clonic spasms of the muscles of the entire right side of the body occurred; the right arm became stiff and almost useless; the right leg contracted sharply from time to time; beginning involvement of the left side made its appearance; slight opisthotonos occurred; patient complained of stiffness in his jaws; a mild picture of "risus sardonicus" was observed, and the diagnosis of tetanus was of course suggested. Tetanus anti-toxin was immediately given, and recovery occurred so rapidly that the effect was indeed dramatic.

COMMENT

After the diagnosis was made, the following history was elicited. Ninety days before, the patient was injured by having the nail torn off the middle finger of his right hand while working with machinery which had come in contact with the soil. The wound became inflamed and painful. Enlarged glands appeared in the elbow and axilla, the latter "as large as a hickory nut." Slight difficulty in chewing was noticed, and some stiffness in the muscles of the right arm.

Six days after the injury sudden and acute pain was felt "under the lower ribs" of the right side, which continued without intermission until recovery. On the seventh day a chill occurred followed by fever, according to the patient's own impression. After this the finger healed rapidly, the enlarged glands subsided, and no further stiffness in the arm was noted.

The story of this infection was told to the physicians who first saw him, but on being assured that there was no causal relation between the wound and his "neuritis" the connection in his own mind faded and these facts were omitted from his history in later examinations. It was also learned that he had been refused compensation on the ground that the later symptoms bore no relation to the injury to his finger.

Before the patient left the hospital, which was within a week of the time of establishing the diagnosis, the first phalanx of the injured finger was amputated. This extra precaution seemed wise, though possibly superfluous, and followed the practice reported by an occasional surgeon.

It may have contributed to his surprisingly prompt recovery without excessive or prolonged treatment with anti-toxin. The focus of infection in this case was pouring the tox-albumin produced into the patient's body in increasing and almost lethal amounts.

In making an "ex post facto" study of tetanus, some forty-five authorities being consulted, the question of amputation of infected members or tissue proved intriguing, and some notes may be of interest. Before the days of anti-toxin, amputation was strongly urged by Berger, Dieulafoy, and Strümpell. In the *Medical and Surgical History of the Rebellion,* twenty-nine operations were reported, with ten recoveries. Yandell in addition reported seventeen cases operated with ten recoveries. Even earlier Dr. Blizard Curling in England reported seven instances of recovery after amputation; and still earlier Baron Larrey had been a conspicuous advocate of amputation. The famous Doctor Abernethy considered the "most promising expedient" to be division of the principal nerve leading *from* the seat of injury.

In retrospect it would seem that the diagnosis in this case might have occurred to mind earlier if it were not for the fact that in the medical teaching which most, or all of us, received we were deeply impressed with the dicta that tetanus is always bilateral and symmetrical, and that trismus is the first diagnostic symptom. One authority says, "the first, or first important symptoms of tetanus are *always in connection with the muscles whose nerves take origin in the medulla oblongata, no matter where the wound is located.*" (Italics ours.)

Some sociological interest attached to the case, since the diagnosis brought the patient's disability within the state law applying to workmen's compensation, and secured for him reimbursement for time lost, and effected his financial rehabilitation.

Hotel Trinity.

ABERRANT SALIVARY GLAND IN THE TONSIL FOSSA

REPORT OF CASE

By RULON S. TILLOTSON, M. D.
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IN view of the frequency with which the operation of tonsillectomy is performed, any abnormality, even though of rare occurrence, noted during this operation is of practical importance.

The finding of salivary gland in the tonsil fossa in the case to be reported is apparently very uncommon, judged from references in the literature. Neuman [1] has reported a case in which, following tonsillectomy, he discovered a salivary gland located above and behind the upper pole of the tonsil. The gland on removal was about the size of a prune stone and extended between the two pillars of the soft palate to the hard palate. Rather careful review of the literature has shown no other reported cases of aberrant salivary gland in the tonsil fossa.

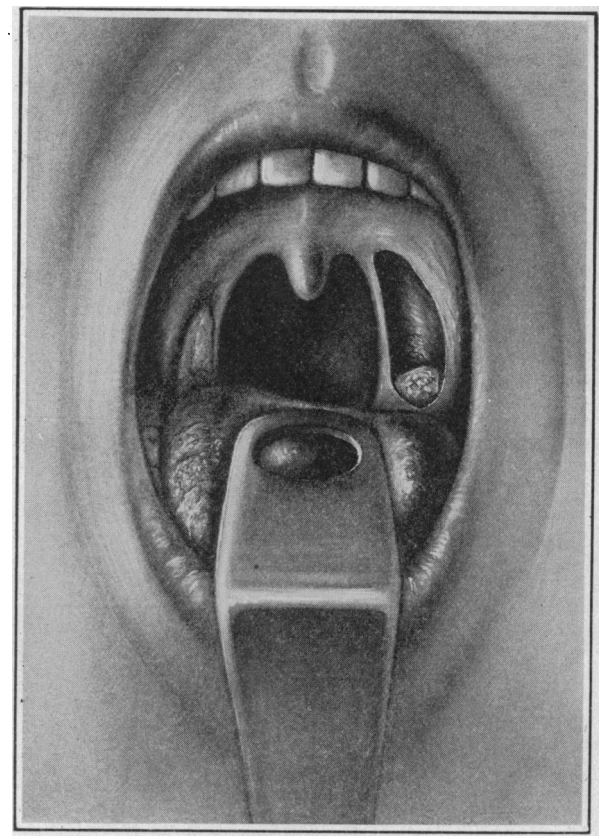

Fig. 1.—Lobular mass of salivary gland in inferior portion of left tonsil fossa noted following enucleation of tonsil.

REPORT OF CASE

An adenotonsillectomy was done under ether anesthesia on a boy of ten years, October 6, 1929. Following enucleation of the left tonsil by the dissection and snare method the fossa was inspected for hemorrhage. On retracting the anterior pillar a lobular mass of tissue was noted in the inferior portion of the fossa (Fig. 1). At first this was taken to be unremoved tonsil tissue. On dissection it was noted to extend outward and backward through a separation in the fibers of the superior pharyngeal constrictor muscle which forms the floor of the fossa. With better exposure of the mass one was impressed with its gross resemblance to salivary gland tissue rather than tonsil. A portion, approximately one centimeter in each of its three diameters, was removed with a snare (Fig 2). Further dissection and removal was considered inadvisable on account of the proximity to the large vessels and nerves in the neck.

The microscopic section (Fig. 3) of the tissue removed showed mixed salivary gland tissue, consist-

Fig. 2.—Portion of salivary gland removed with snare